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W.P. THOMPSON & CO. Coopers Building
Church Street
Liverpool L1 3AB(GB)(54) **A device for cleaning floors.**

(57) A device for sweeping floors or the like, has a stick (1) attached to a frame-part (2) which has been equipped with a detachable cleaning cloth (5) for said sweeping. In addition the frame-part (2) includes at least two attachment spikes for attaching the cleaning cloth to the cleaning device by punching the cloth to the spikes, and a protector (7) extending over the points of the spikes to protect a user from the spikes and to protect the spikes from accidental damage.

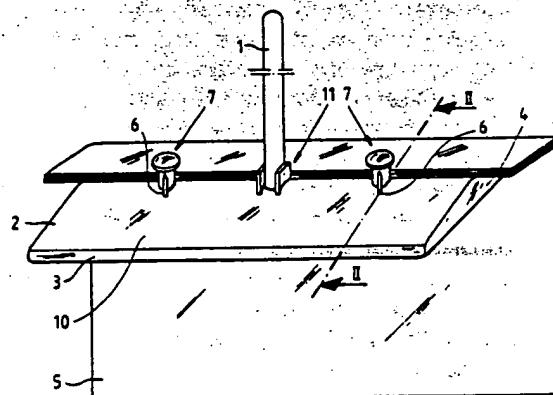


Fig.1

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topmost cloth being detached as it gets dirty and the other cloths remaining in place. Thick cloths as well as cloths of various sizes can be used in the device.

By way of example only, a specific embodiment of the present invention will now be described, with reference to the accompanying drawings, in which:-

Fig.1 shows an embodiment of floor cleaner in accordance with the present invention; and

Fig.2 is a view in the direction of arrows II-II of Fig. 1.

The floor cleaner shown in Fig.1 includes a stick 1 and a planar frame-part 2 connected in an articulated manner to the stick. The frame-part includes mainly straight side-edges 3 and end-edges 4 substantially shorter than the side-edges. Sharp pointed attachment spikes 6 as well as circular shield-like protectors 7 near the spikes have been fixed to the top surface 10 of the frame-part. The attachment spikes and their protectors are situated on the frame part on the line parallel with the side-edge 3 and passing through the connection point 11 of the stick.

The attachment mechanism of the device, for the cleaning cloths, shown in Fig.1, is shown in more detail in Fig.2. The mechanism includes attachment spikes 6a, 6b fixed on the top surface 10 as well as a protector 7 fixed on the top surface between the spikes. The protector 7 is formed of a circular shank 8 and a wider plate-like spike shield 9 situated on the top of the shank, at a distance spaced apart from the spikes and above them so that a gap 12 remains between the protector and the point of the spike.

The device is used in the following manner. A bundle of disposable cleaning cloths 5 is attached to the spikes 6 adjacent to one straight edge of the bundle by pressing the edge of the bundle through the gap 12 so that the spikes are punched through the whole bundle at a distance apart from the edge of the bundle. In this manner the bundle is attached on both sides of the connection point 11, at which stage the device is ready for usage. The cloth bundle can, if desired, be folded round the frame part 2 and attached also adjacent to its opposite edge to the other spikes of the spike pairs. Advantageously, however, the cloth is attached only from its other edge, because the usable cleaning surface will be substantially larger and the cloth

remains securely in its attachments without detaching during cleaning. As the cloth becomes dirty it is easy to detach by gripping its upper corner and lifting it from the attachments, at which the cloths below remain in their place and the next cloth is ready for usage.

The protectors 7 according to the invention can also be of other shape, as long as they protect the points of the spikes and prevent the user from being hurt by the spikes.

Claims

1. A device for sweeping floors or the like, which device comprises a stick (1) attached to a frame-part (2) which is provided with a detachable cleaning cloth (5) for said sweeping, characterized in that the frame-part (2) comprises at least two attachment spikes (6) for attaching the cleaning cloth to the cleaning device by the spikes piercing the cloth.
2. A device as claimed in claim 1, characterized in that a protector (7) is situated near each spike (6) in order to protect the user from the sharp spike and the spike from outside knocks.
3. A device as claimed in claim 2, characterized in that the protector (7) comprises a shank-part (8) connected to the frame-part (2) of the device and a spike shield (9) connected to the shank near the point of the spike (6) at a distance from the spike.
4. A device as claimed in claim 2 or 3, characterized in that the frame-part (2) is provided with a pair of attachment spikes (6a, 6b) situated either side of a centre line of the stick (1), and the protector (7) is placed between the pair so as to extend over the points of the pair of spikes.
5. A device as claimed in any of claims 1 to 4, characterized in that the device includes a connection point (11) for connecting the stick (1) in a cross-wise articulated manner to the frame-part (2), which frame-part comprises parallel, mainly straight, side-edges (3) and end-edges (4) substantially shorter than the side-edges.
6. A device as claimed in claim 5, characterized in that the frame-part (2) has a shape of a parallelogram formed of the parallel side-edges (3) and the parallel end-edges (4).

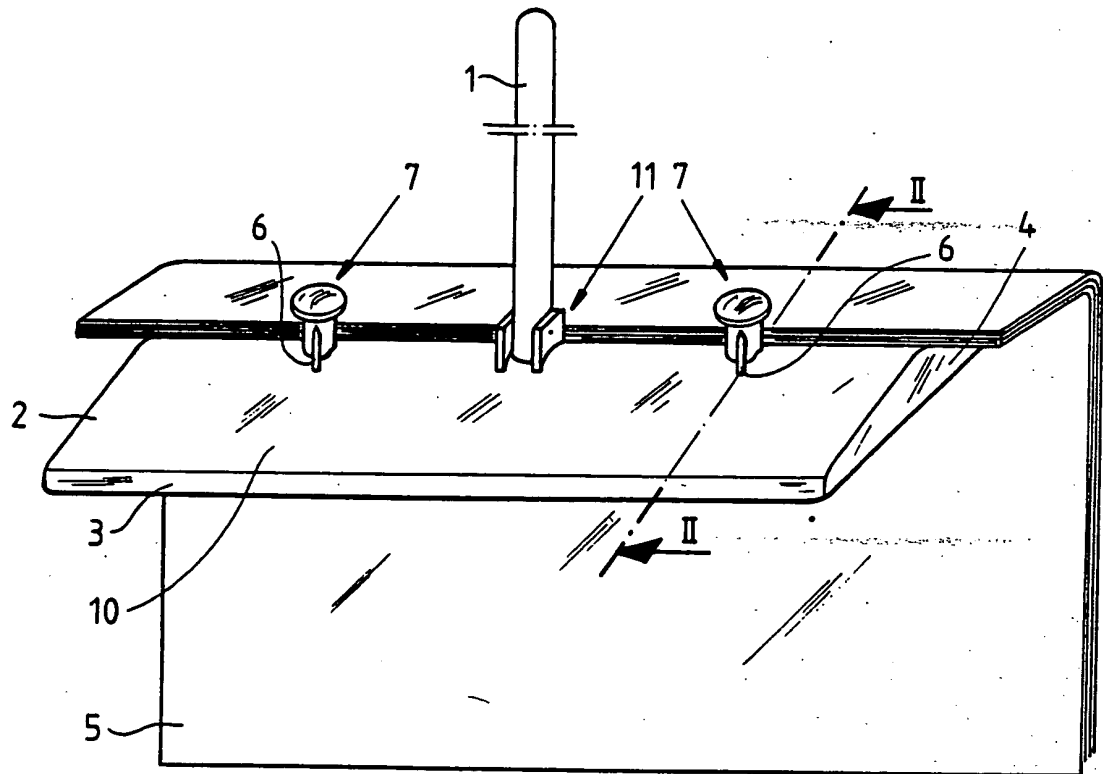


Fig. 1

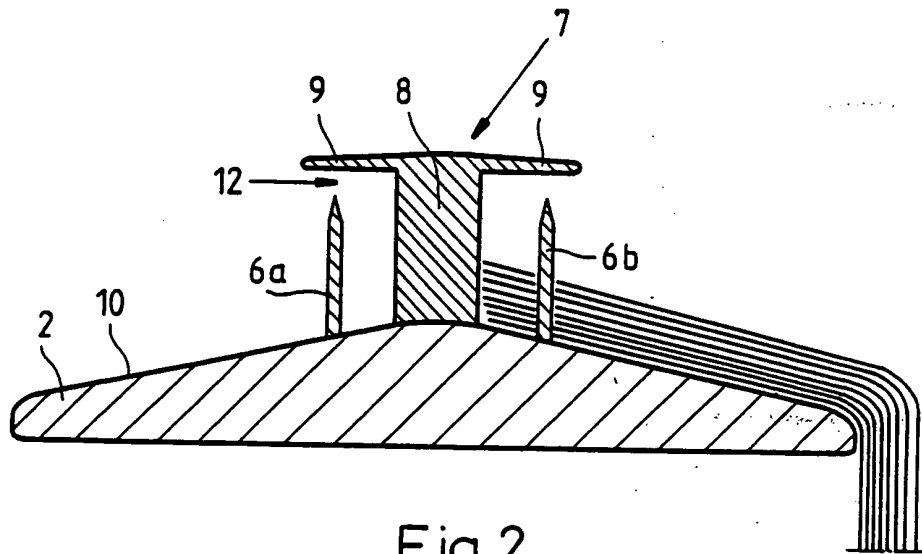


Fig. 2



European Patent
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EUROPEAN SEARCH REPORT

Application number

EP 86 30 3645

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	DE-U-7 500 137 (HENRICHSON) * figure 1, reference number 8; claim 8; page 3, column 4 *	1	A 47 L 13/10 A 47 L 13/44
X	BE-A- 497 223 (BOIZARD) * figures 1, 2, reference number 3; claim 1 *	1	
A	DE-C- 587 847 (LIEBECK) * figure 1; page 1, lines 46-49 *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			A 47 L 13/00
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 15-08-1986	Examiner SCHLAITZ J
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

15/209.1
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88-120861/18 A97 BENT-30.09.86
MELITTA-WERKE BENTZ *EP -265-684-A
30.09.86-DE-U26035 (04.05.88) A471-13/16 B32b-27/10
Absorbent kitchen roll - with watertight plastics foil fixed to paper or
fibre mat layer
C88-054101 R(AT BE CH DE ES FR GB GR IT LI LU NL SE)

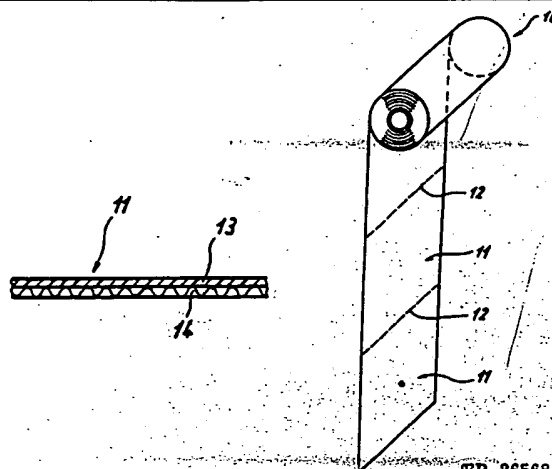
A(12-B3, 12-D4, 12-S6C)

An absorbent kitchen roll (10) for drying and wiping dishes and furniture is made of water-impermeable plastics foil (13), firmly joined to highly absorbent paper or fibre mat material (14). Perforations (12) separate the squares (11) from each other.

ADVANTAGE

This has a high absorptive capacity but cannot become soaked through. (4pp39PADwg.No1+2/2)

(G) ISR: No Search Report.



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